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MONTHLY NOTICES

OF THE

ROYAL ASTRONOMICAL SOCIETY.

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SIR R. S. BALL, LL.D., F.R.S., PRESIDENT, in the Chair.

Eric Doolittle, B.Sc., Flower Observatory, University of Pennsylvania, Philadelphia, Pa., U.S.A.;
Rev. Kingsbury Jameson, M.A., Highfield, Hendon; and
Alfred Taylor, Polvellan, Holgate Hill, York,

were balloted for and duly elected Fellows of the Society.

The following Candidates were proposed for election as Fellows of the Society, the names of the proposers from personal knowledge being appended:—

George Banaster, The Mythe Villa, Tewkesbury (proposed by the Rev. C. D. P. Davies);
Edward J. Essam, Chemist, Billingborough, Lincolnshire (proposed by the Rev. W. R. Waugh);
The Hon. George Stuart Forbes, I.C.S., Revenue Secretary to the Governor of Madras (proposed by C. Michie Smith); and
The Rev. William Edward Winks, 58 Richmond Road, Cardiff (proposed by Arthur Mee).

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One hundred and seven presents were announced as having been received since the last meeting, including, amongst others :—

Nautical Almanac for 1901, presented by the Lords Commissioners of the Admiralty ; M. W. Meyer, Das Weltgebäude ; and W. Peck, the Observer's Atlas of the Heavens ; presented by the authors.

Note on Dr. Gill's paper "On the Effect of Chromatic Dispersion of the Atmosphere on the Parallaxes of α Centauri and β Orionis, etc." By Arthur A. Rambaut, M.A., Sc.D., Radcliffe Observer.

In the *Monthly Notices* for 1897 December Dr. Gill publishes a paper under the above title, in which he criticises very adversely some conclusions on the same subject which I communicated to the Society in 1895 January.

Before proceeding to examine his arguments I should like to correct an impression which his paper is likely to convey, and to state that the object of my former communication was, not to criticise Dr. Gill's method of discussing his heliometer measures of *α Centauri*, nor to obtain the most probable value of the parallax of this star, but merely to see how far his observations supported the hypothesis that the effect of a difference in the mean refrangibility of the light of two stars is really sensible in refined astronomical measures, and it is only incidentally that the question of the exact numerical value of the parallax enters at all. Thus on p. 135 of the *Monthly Notices*, vol. lv., in the paper referred to, I say: "I have accordingly examined this series of measures, and the three which follow it in the same Memoir, with a view to establishing the existence of such a difference." Again, on p. 141 I say: "My object at present is, not to improve on the value of the parallax deduced . . . but to examine the effect which atmospheric dispersion may have on such measures." It is only at the very end of the paper, in summing up the results of my investigation, that I refer to the values of the parallax which I arrived at in these terms : "Whatever value may be assigned to the particular solutions which I have found, . . . and whether it be thought that the correction I have introduced accounts fully for the systematic error depending on hour angle which runs through them all, and that the still outstanding quantities should be attributed to the accidental errors inseparable from observations of such delicacy and difficulty . . . I think I have shown at least that in parallax measures a term ought to be introduced into the equations of condition of the form

$$d\beta \tan \zeta \cos (p-q)$$

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